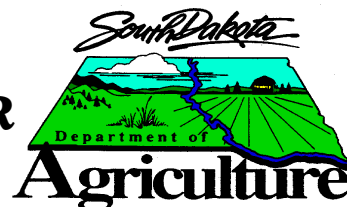


South Dakota Department of Agriculture

PESTICIDE APPLICATOR NEWSLETTER

Spring 2001* Issue 21



PRIVATE APPLICATOR WEB TRAINING NOW AVAILABLE ON THE INTERNET:

The South Dakota Department of Agriculture private applicator internet training site is currently up and running. This system allows for pesticide training over the internet. By using this system, applicators can now take the exam at the convenience of their own time and in their own home. The internet address to access the private applicator exam site is as follows;

<http://www.state.sd.us/doa/das/pwt>.

The site has instructions to assist you in completing the exam and assisting you through the process. This site allows the individual to initially get certified for the first time and also for the individual who needs to recertify. For individuals who are using this system to recertify you will need to know your current private applicator license to complete the process. If you do not know your current license number, this information can be obtained from the following web address;

<http://www.state.sd.us/doa/databases/index.cfm>.

The requirements for what qualifies you as a private applicator is any individual who uses any pesticide in the production of an agricultural commodity with the gross sales potential of \$1000 or more per year on property owned or rented by them or their employer, must be certified as a private applicator. Private applicator certification also includes applications on another's property if done in exchange for services, **not for hire**. The person who actually does the application is the one who must be certified. Your private applicator certification is good for five years. Applicators may still get initially certified by either attending a p.a.t. meeting or by completing a take home open book exam.

If you have any questions or comments regarding this exam site you may contact the SD Dept. of Agriculture, Division of Ag. Services at 605-773-4432.

COMMERCIAL APPLICATOR ONLINE REPORTING APRIL 13, 2001

As previously reported in the last newsletter, commercial applicators will be receiving a **mandatory** pesticide application survey. Kelly registration systems has developed a online reporting system for SD. The system is applicable to any state database where a customer, applicator, or user is required to submit information to the state. The net result to the state by submitting the information online is a savings of data entry time and improved accuracy. Complete instructions will be included in your survey packet.

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HANDLING PESTICIDES SAFELY



**SIOUX VALLEY
POISON CONTROL
NUMBER:
1-800-764-7661
OR
1-800-Poison-1**

Pesticides are one of the many tools that are available for effective protection of crops from weeds, insects and diseases, however they do require special care and handling.

The following practices outline common sense ways to protect applicators, our environment and our water supplies. Take into consideration what precautions are appropriate for your situation and put into practice the ones that make sense to you.

1. Eliminate or minimize exposure to pesticides during mixing, loading, cleaning and applying pesticides. Always read the pesticide label for information on required personal protection equipment for the specific pesticide you are using.
2. Know what to do in case of accidental pesticide exposure. Provide emergency wash stations for personnel exposed to pesticides, and develop a safety plan complete with information about locations and telephone numbers of emergency treatment centers.
3. Wash affected areas after exposure to skin and remove personal protective equipment prior to eating, drinking or smoking.
4. Wash and dry personal protective equipment and store separately from other laundry. Wash clothes exposed to pesticides separately from other laundry.
5. Know what to do in case of a pesticide poisoning. Have a pesticide first aid kit readily available. Check the product label for specific instructions and call the poison control center in the event a pesticide is swallowed, or in the event of a serious dermal or inhalation exposure.

USE CARE WHEN PURCHASING PESTICIDES OVER THE PHONE

Every year, the South Dakota Department of Agriculture receives reports and complaints, regarding over the phone sales solicitations of pesticides. The performance claims that are being made are usually exaggerated and sound too good to be true. These so called wonder products often cost considerably more than you would normally pay for a comparable product. When considering prices, the per acre cost of the product (not the cost per gallon) needs to be compared with the per acre cost of the products you normally use.

Before buying pesticides over the phone, ask the salesperson for the EPA registration number of the product being sold. Before you make a purchase, contact the Department of Agriculture to see if the product is registered for sale in South Dakota. Many times these products are being sold in South Dakota without being registered, which is an illegal practice. Also, request a copy of the label before buying so you can determine the name and amount of the active ingredient, the labeled application sites and use rate.

If the salesperson will not provide you with this information, it is very probable that the pesticide product is being sold illegally in the state.

In conclusion if the product claims sound too good to be true, they probable are. Buying your pesticide products from established dealers and sales representatives is a way to get the full value from your purchases.



ON-FARM FERTILIZER STORAGE

With the anticipated increase in fertilizer costs and possible local short term shortages, more on-farm storage may be an option producers are considering this spring.

At present in South Dakota, no fertilizer storage and handling requirements are directed toward agricultural producer operations other than reporting spills. Occurrences of pollution however, may be a violation of state and federal acts such as the Clean Water Act.

Items you need to consider before you decide if on-farm storage is appropriate for your operation is to taking into account protecting surface and ground water, potentially costly clean-up of contaminated water and soil in the event a spill occurs, being liable for potential environmental damage to others, and the loss of water or land use to contaminated areas.

Some guidelines for on-farm fertilizer and storage handling include the following items;

- Replace worn or faulty valves, plugs and threaded fittings into the storage containers.
- Install backflow prevention devices or use air gap separation on water supply lines used for fertilizer mixing or equipment rinsing.
- Lock valves and shutoff devices while storage containers and facilities are not in use.
- Storage facilities should not be located in areas with high probability of flooding.
- Follow hazard safety rules, worker protection laws and fire prevention rules while handling and storing fertilizer.
- Review groundwater sensitivity information before constructing any fertilizer storage facilities or handling areas.
- Use approved containers designed and compatible with the product being stored for the purpose of storing fertilizer.
- Construct storage buildings so as to not allow seepage or spillage of fertilizer under normal conditions.
- Locate dry fertilizer storage buildings or liquid fertilizer secondary containment over 500 feet away from a well, water supply or surface water run off area.
- Construct liquid fertilizer secondary containment capable of holding 125 percent of the volume of the largest container plus the volume of the units of all other containers inside the liquid containment area.
- Design loading areas to prevent spillage onto unprotected areas and provide proper cleanup area by installing curbed containment.
- Unless stored in a totally enclosed building, all non liquid fertilizer materials should be covered and stored within an appropriate secondary containment storage structure.
- Apply appropriate sealant to seams and cracks in all storage facilities and load/wash/rinse pad areas.
- Construct dry storage for secondary containment which is of sufficient thickness and strength to withstand loading conditions.
- Fertilizer rinsates and materials that accumulate in containment areas should be applied to cropland at normal fertilizer rates.
- Washing of fertilizer equipment in the field is encouraged when performed at the site of fertilizer application on the day it is applied.
- Avoid rinsing near a well, stream, lake or wetland.



M-44 TRAINING HELD; ADDITIONAL TRAINING DATE SCHEDULED

The South Dakota Department of Agriculture in cooperation with the Wyoming Department of Agriculture, and the South Dakota Game, Fish & Parks recently held a one day training session to certify individuals in the proper use of M-44 Sodium Cyanide devices. On February 13, 2001 in Rapid City, 103 individuals participated in the six hour training session. At the conclusion of the days training, participants took an open book exam to test their understanding and comprehension of the days training material.

The M-44 is a spring loaded device that is used to control predation of livestock by coyotes, foxes and wild dogs. This device is closely monitored by the US EPA and has several stringent guidelines. The mandatory one day training session is the first step that applicators must take in order to be able to use the device. The training consists of proper placement and handling of the M-44 device, use of the antidote kit, understanding the Federal Regulations associated with the use of the device, and reporting requirements.

The second step is to successfully pass the open book test with a minimum score of 70%. In addition to the training and M-44 test, applicators must also have or be able to obtain a pesticide applicators license, either private or commercial, depending on how they intend to use the product.

The SD Dept. of Agriculture has been working to bring the M-44 device to the states livestock producers since 1996, meeting numerous federal restrictions in order to provide another predator control method.

Because of the high interest in the M-44 device another training meeting has been scheduled for Tuesday, April 17, 2001 in Rapid City.

If you are interested in attending please contact the Dept. of Agriculture for more information at 773-4432



CANCER MORTALITY IN FOUR NORTHERN WHEAT-PRODUCING STATES

Chlorophenoxy herbicides (2,4-D, MCPA) are used both in cereal grain agriculture and nonagricultural settings such as right-of-ways, lawns, and parks. Minnesota, North Dakota, South Dakota and Montana grow most of the spring durum wheat produced in the United States. More than 90% of the wheat is treated with chlorophenoxy herbicides, in contrast to treatment of approximately 30% of winter wheat. Not only are people working in the ag. industry exposed (farmers, farm workers, pesticide manufacturers and mixers and spray pilots) but their families are also exposed because of contaminated clothing or dust tracked into their homes. Lawn care workers and highway maintenance workers are also exposed. Other routes of exposure are drift from pesticide applications to crops, contamination of surface or groundwater, or walking in recently sprayed lawns and fields.

Age-standardized cancer mortality rates were determined for grouped counties based on wheat acreage per county or for individual counties for frequently occurring cancers. The cancer sites that showed positive trends of increasing cancer mortality with increasing wheat acreage were esophagus, stomach, rectum, pancreas, larynx, prostate, kidney, brain, thyroid, bone and all cancers (men) and oral cavity and tongue, esophagus, stomach, liver and gall bladder and bile ducts, pancreas, cervix, ovary, bladder and other urinary organs and all cancers (women).

Rare cancers in men and women and cancers in boys and girls, were studied by comparing counties above and below the median of wheat acreage per county. There was increased mortality for cancer of the nose and eye in both men and women, brain and leukemia in both boys and girls, and all cancers in boys. These results suggest an association between cancer mortality and wheat acreage in counties of these four states.

For further information on this study you can contact D.M. Schreinemachers, from National Health Research Lab located at the United States EPA facility located at Research Triangle Park, North Carolina. The phone number is 919-966-5875.

PESTICIDE SENSITIVITIES AND DRIFT

Before beginning a pesticide application, applicators must consider many drift-related factors including wind speed and direction, other weather conditions, application equipment, volatility of chemicals and the proximity of sensitive plants, animals and people. This becomes increasingly important when spraying in the vicinity of people with known chemical sensitivities.

You may wish to visit with these individuals before conducting any spraying in the area and advise them on the steps you are planning on taking to mitigate potential drift. You should include the equipment you are using, weather conditions that you intend to spray in, to avoid drift onto their property, and buffer strips that you are leaving. A pre-spray checklist would be a valuable tool to use to convey the precautions you will be taking.

While these actions may seem time-consuming, it can help you determine the nature of these chemical sensitivities and reduce any potential reactions, misunderstandings and confusion that may occur. The time that you take to identify potential problems before hand may help you from becoming involved in a costly chemical complaint.



COMMERCIAL APPLICATOR RECORD REQUIREMENTS

Each commercial pesticide application that is made has to have the following elements on the application record. If you are licensed as a private applicator and spray restricted use pesticides you are also required to have a complete application record. Private applicators spraying general use products are not legally required to keep application records but it is a good business practice to do so. One of the areas of concern that our Department of Ag. field inspectors observe every year is incomplete records. Besides being a requirement to have all required application information, keeping accurate records may help you in the event you are involved in a drift complaint. The following items are needed on each commercial application record;

1. The name and address of the person for whom the pesticide was applied.
2. The location of the land or property where the pesticide was applied.
3. The pest to be treated.
4. The acreage, area or other appropriate description.
5. The year, month, day and beginning and ending time for each application for each day the pesticide was applied.
6. The person or firm who applied the pesticide.
7. The trade or brand name and common name and the EPA registration number.
8. The company name appearing on the product label.
9. The weather conditions at the time of the application, including direction and estimated velocity of the wind and the temperature at the time the pesticide was applied.
10. Amount of pesticide applied and concentration in pounds or gallons.
11. Specific crop or commodity to which pesticide was applied.
12. Name and address of applicator.

TUNE-UP YOUR SPRAYER FOR SPRING



2001 SPRAYER TUNE-UP CLINIC

The sprayer tune-up clinics are a cooperative effort of the SDSU extension service and the SD Dept. of Agriculture. The program was made possible by funding secured by the SD Attorney Generals office as settlement of a class action lawsuit pertaining to ag. chemicals, funds provided by SD Ag. Business Association and support from private industry.

State agency and industry funds have made it possible to provide South Dakota's pesticide applicators with information and tools necessary to potentially increase the efficiency of spray equipment.

These clinics will include discussions on topics such as sprayer setup and maintenance, regulatory issues, sprayer calibration, drift reduction measures and an introduction to site -specific application equipment.

Several meetings have already been held. The training dates and locations for the remaining meetings are as follows;

Renner-	April 20, 2001
Miller-	April 26, 2001
Bison-	May 22, 2001

All Attendants will receive:

**A Calibration/Safety kit (Retail value \$ 100)
Hands-on experience calibrating a sprayer**

To Pre-register contact your local extension office.

SELECTING CONVENTIONAL vs GENETICALLY MODIFIED SEED

In light of last year's Starlink incident, many producers will likely question whether to plant conventional or genetically modified (GM) seed this year. When making planting decisions, however the important decision will be for producers to insure the seed they choose is an export-approved variety and that they have considered all marketing considerations for the harvested grain.

Starlink corn was not an export-approved variety. While Starlink had domestic non-food use approval, studies to determine if it could be permitted for human consumption were not completed prior to marketing the seed.

The Starlink incident poses other concerns this year for South Dakota producers. Control of volunteer corn in fields where Starlink was planted last year will be even more important. Rotating from corn to another crop this year in those fields will help easily identify and control the volunteer corn to further insure no cross- pollination occurs. The US Department of Agriculture also advises producers to insist that seed companies verify their seed corn has been tested for Cry9C, the protein found in Starlink, to ensure that only tested seed is planted this spring.

The Food and Drug Administration has endorsed the safety of bioengineered products and many GM seed varieties are export-approved. GM seeds and other biotech advances promise many environmental, financial and human health benefits.

The South Dakota Dept. of Agriculture encourages producers to plant only export-approved seed varieties this year unless the grain is intended to be fed to your livestock or used for non-food industrial uses. Contact your seed dealer to determine if the seed variety you intend to plant is approved for export. Department of Ag. staff will be working with South Dakota seed dealers to compile a list of export-approved seed varieties and list some seed varieties that are not export-approved. This list will be available soon on the South Dakota Department of Agriculture Internet site <http://www.state.sd.us/doa/doa/html>. Regardless of the seed you intend to plant this year, you need to insure that all label directions are followed.

FOOT AND MOUTH DISEASE ADVISORY

- A worldwide spread of Foot and Mouth Disease seriously threatens the livestock industry and wildlife populations of our country and our state.
- People traveling to countries where livestock are affected are capable of carrying the virus on their persons, clothing, luggage or other inanimate objects.
- Any planned travel to countries where this disease exists must be reconsidered in light of the potential threat to South Dakota's huge livestock economy and that of the United States.
- Every effort should be made to suspend travel to and from countries with livestock affected by the disease.
- Prior to any planned travel abroad please call to determine the FMD status of that country:
 - **South Dakota State Veterinarian's office (605) 773-3321.**
 - **US Department of Agriculture, Veterinary Services, Pierre, SD (605) 224-6186**

Foot and Mouth Disease is not considered a human health risk but humans can carry the virus on their clothing, shoes, body (particularly the throat and nasal passages) and personal items. The disease is extremely contagious and spreads easily among cloven- hoofed animals such as cattle, sheep, pigs, goats and deer. Introduction of FMD into this country would be disastrous to the American livestock industry and wildlife community. For this reason all visits to farms or other livestock facilities in FMD infected areas and all food items and other materials of plant or animal origin in the travelers possession must be

reported on the US Customs Declaration Form upon entering the country.

NOTICE: Should anyone traveling from a country with FMD into South Dakota and visit a farm in violation of the 5 day no contact period, the entire farm will be quarantined and no movement off the premise will be allowed without disinfection and permit by the State Veterinarian. This is all-inclusive including vehicles and persons.

NOTE: Countries with outbreaks in recent weeks include:

Great Britain, Ireland, France, Netherlands, Argentina

HOUSE BILL 1298 GOES IN TO EFFECT

House Bill 1298 An Act to regulate the manufacture, labeling, storage, and distribution of certain ruminant livestock feeds and to declare an emergency. HB 1298 requires that all ruminant livestock feed distributed in South Dakota contain a statement on the label declaring whether or not the feed was produced in a feed manufacturing facility that handles or stores any ingredient or product containing an ingredient that is prohibited from use in livestock feed by federal regulations. It also allows the state Secretary of Agriculture to issue rules regulating commercial feed and pet food to protect South Dakota's livestock industry from the Mad Cow disease. **HB 1298 PASSED AS AN EMERGENCY CLAUSE AND WENT INTO EFFECT ON MARCH 28, 2001**

The Department of Agriculture is currently in the process of developing the specific rules to implement the bill. The rules will be published for public comment and a public hearing held before adaption.

HOUSE BILL 1019 PASSES

The 2001 legislature adopted HB 1019 which sought to revise permit structures and fees in several regulatory programs. While some fees increased, others were decreased resulting in a projected \$280,000 a year reduction in fees collected. Licensing and reporting periods were extended to 2 years to increase efficiencies. The number of different types of licenses were also reduced to help make it easier to understand which license is required. Information about the changes is being developed and will be provided to those directly affected prior to the implementation date.



PESTICIDE APPLICATOR NEWSLETER

Issue: 21 - Spring 2001

DEPARTMENT OF AGRICULTURE
Division of Agricultural Services
Foss Building, 523 East Capitol
Pierre, South Dakota 57501-3188

Bulk Rate
U.S. Postage
PAID
Permit #1209
Sioux Falls, SD

ENFORCEMENT CASE UPDATE

Southeast SD- A \$500 civil penalty to a retail facility for not using containment during the loading of fertilizer.

Northeast SD- A \$ 440 civil penalty to a certified commercial applicator for drifting pesticides onto adjacent trees during an application to a cornfield.

Northeast SD- A \$550 civil penalty to a certified commercial applicator for letting an unlicensed minor apply pesticides.

Central SD- A \$1235 and \$385 civil penalty was given to two certified commercial applicators for drifting Roundup onto adjacent pasture and hay ground. (One producer effected by both applications).

Central SD- A commercial applicator paid a \$180 civil penalty for advertising fertilizer for sale without having a fertilizer license. Also a warning for not having an Emergency discharge response plan on file.